

Abstract

A solid polymer electrolyte membrane fuel cell electrode catalyst layer comprises Pt particles carried on a carbon carrier and a solid polymer electrolyte, wherein a center-to-center distance dimension (L_{pt-pt}) between the Pt particles carried on the carbon carrier is made to substantially coincide with the sum of a double of a total dimension resulting by adding the length (L_{pes}) of a side chain having an ion-exchange group to the diameter (D_{pem}) of a main chain of the solid polymer electrolyte and the diameter (D_{pt}) of the Pt particle.